July 3, 2001
Ref. No.: EOS/ETS-0202-C01

National Aeronautics and
Space Administration
Goddard Space Flight Center
Greenbelt, Maryland  20771

Attention:      Mr. Willie Fuller
                Code 581
                Building 32, Room N212D

Subject:        Contract No.:  NAS9-98100
                CSOC ETS Completion Form Task
                EOSDIS Test System (ETS) Simulated CCSDS Telemetry Generator
                (SCTGEN) -- Delivery of the Patch Release 2.6.1 Software

Dear Mr. Fuller:

The CSOC contractor is pleased to deliver Patch Release 2.6.1 of the Simulated CCSDS
Telemetry Generator (SCTGEN) of the ETS.  Release 2.6.1 of SCTGEN provides
solutions to one Discrepancy Report (DR), in support of PM-1 and ICESat missions.

The delivery package contains 5 attachments as listed below, describing the delivery
contents, build instructions, resolved DRs, and release history.  A completed Mission
Systems Configuration Management (MSCM) form is included.

If you have any questions concerning this delivery, please call me at (301) 805-3609.

                                Sincerely yours,


                                Chii-Der Luo
                                Tools and Special Facilities Manager


Delivery Package Reviewed by:


Joe Polesel
Simulation Group Sustaining Engineer Manager

Delivery of the Release 2.6.1 Software
July 3, 2001, Ref. No.: EOS/ETS-0202-C01
EOSDIS Test System (ETS) Simulated CCSDS Telemetry Generator

Page Two

The following attachments contain the details of the SCTGEN software.

Attachment  A  - contains the instructions to build and install the software
Attachment  B  - contains a list of the resolved DRs
Attachment  C  - contains the release history summary matrix
Attachment  D  - contains a file name listing of the delivery contents
Attachment  E  - contains the Mission Systems Configuration Management (MSCM)
                 form


Distribution:   (* - Letter Only)

| NASA | HTSI | Lockheed Martin | CSC |
|------|------|-----------------|-----|
| Fuller, W. * | Bradbury, T.* | Cordier, G. | Green, D. |
| Harbaugh, R.* | Luo, C. | | Noone, E. |
| Iona, G.* | Braun, J. * | | Polesel, A. |
| Johns, A.* | Zarek, J. * | TRW | Shurie, E. |
| Kelly, A. | | | Whitesell, S.* |
| Ondrus, P.* | | Tiren, C. | Task File. |
| ESDIS Library | Unisys | | |

| | Coleman, C. | Raytheon | Caelum |
|--|-------------|----------|--------|
| QSS | | | |
| | | Singhal, S. | Holmes, D. |
| Chomko, E. | | | Siskind, A. |
| Elfant, C. | | | |
| Walters, A. | | | |

**<u>Attachment A — Release 2.6.1 Build Instructions</u>**

SCTGEN consists of two elements:  (1) the SCTGEN Graphical User Interface, referred to as SCTGUI; and (2) the SCTGEN application software, referred to as SCTGEN. Instructions for building the complete system, SCTGEN Release 2.6.1, step by step, are contained in the following sections.


## A.1    Introduction

The patch release SCTGEN Release 2.6.1 consists of 3 source files, which are being delivered on tape media.  The files "globals.tcl", "procREGION.tcl", and "winSCRIPT.tcl" will replace the files of the same name in the $HOME/sctgui2.0/source/tcl directory.  Note that SCTGEN Patch Release 2.6.1 can only be overlaid over SCTGEN Release 2.6.


## A.2    Build SCTGEN

1) Change to the $HOME/sctgen2.0/work directory.
2) For the SGI platform, type "sgi.mksctgen.cmd all", for all other platforms type "mksctgen.cmd* all", to build all of SCTGEN.  This will take about 10 to 15 minutes and will generate warning messages.
3) Change to the $HOME/sctgen2.0/work directory and type "cp sctgen ~/sctgui2.0/bin/*platform*.sctgen2.6.1" to rename the SCTGEN executable, where *platform* is sgi, hp, or sun.
4) Change to the $HOME/sctgui2.0/bin directory.
5) Type "rm sctgen" to remove the current executable.
6) Type "ln –s ./*platform*.sctgen2.6.1 sctgen" to create a link to the executable, where *platform* is sgi, hp, or sun.

<u>*For the HP platform:</u>
For step 2, do not type the sgi prefix.
For steps 3 and 6, replace "hp" for "sgi", or something comparable to denote host platform.

<u>*For the SUN platform:</u>
For steps 2, do not type the sgi prefix.
For steps 3 and 6, replace "sun" for "sgi", or something comparable to denote host platform.

Note: The file names may not be exactly the same depending on the platform.  For example, different UNIX systems might have different header file extensions.  Make sure that the correct files are replaced, otherwise, the changes will not take effect.


## A.3     Supported platforms

Previous versions of SCTGEN have been built and tested using the environments listed below.

SUN platform:
- SunOS Generic Version 4.3 including C++ compiler for SUN UNIX.

HP platform:
- HP OS Version 9.0 including C++ compiler for HP UNIX.

SGI platform:
- IRIX Version 6.2 including standard CFRONT compatible C++ compiler.

## Attachment B — Resolved Discrepancy Reports

This attachment reflects the DRs that were addressed with SCTGEN Release 2.6.1.  The DRs are listed in the table below by DR number, status, severity, subsystem name, short description, and related NCR number.  A full description of each DR follows the summary table.  Complete information on all DRs is maintained in the ESDIS Discrepancy Report Tracking Tool (DRTT), which can be accessed via the Internet at address http://iree.gsfc.nasa.gov/ddts/ (directly) or from the ESDIS Activities, Progress Reports and Schedules page at http://spsosun.gsfc.nasa.gov/ESDIShome.html.

## Summary of Closed Discrepancy Reports

| Critical(1) | Urgent(2) | Routine(3) |
|:---:|:---:|:---:|
| 0 | 1 | 0 |

## Status Definitions

| | | |
|---|---|---|
| N - New | A - Assigned Analysis | R – Assigned Resolution |
| D - Delivered | V - Verified | C - Closed |
| W - Withdrawn | P - Postponed | X - Duplicate |

| DR/IDR # | Status | Severity | Subsystem | Description | Related NCR |
|---|---|---|---|---|---|
| ETS0347 | A | 2 | SCTGEN | Blank value for quicklook field in script | ETSdev0036 |

**Total number DRs addressed=1

**ETS0347**

When setting the quicklook flag on the 2HDR Menu Panel the user no longer receives the Event Listing Menu Panel to define which packets should have the quicklook flag set. This results in the quicklook field containing a blank value (quicklook()) placed in the script. The following error is received when the user attempts to run the script:

"stream.pkt.ap00xx.region.2hdr : undefined event name [error 2]."

Workaround is for the user to create an event and manually enter the event name in the script.

Related to DR ETS0312

## Attachment C — Release History Summary Matrix

The attached Release History Summary Matrix reflects the SCTGEN Release 2.6.1 Delivery.

| Release History Summary Matrix | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SYSTEM: | SCTGEN | | | | | | | PAGE | 1 OF 2 |
| RELEASE NUMBER | | 1.0 | 1.1.0 | 1.2.0 | 1.3.0 | 1.4.0 | 1.5.0 (2.0) | 2.1 | 2.2 |
| DELIVERY DATE | | 3/3/97 | 5/27/97 | 8/25/97 | 2/27/98 | 6/26/98 | 9/10/99 | 11/30/99 | 2/2/00 |
| CONFIGURATION ITEM | CI NO. | | | | | | | | |
| SCTGEN GUI | 5.1 | 1.0 | 1.1.0 | 1.2.0 | 1.3.0 | 1.4.0 | 1.5.0 (2.0) | 2.1 | 2.2 |
| SCTGEN Application Software | 5.2 | 1.0 | 1.1.0 | 1.2.0 | 1.3.0 | 1.4.0 | 1.5.0 (2.0) | 2.1 | 2.2 |
| | | | | | | | | | |
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| Release History Summary Matrix | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SYSTEM: | SCTGEN | | | | | | | PAGE | 2 OF 2 |
| RELEASE NUMBER | | 2.3 | 2.4 | 2.5 | 2.5a | 2.6 | 2.6.1 | | |
| DELIVERY DATE | | 6/9/00 | 10/18/00 | 1/26/01 | 2/9/01 | 5/14/01 | 7/3/01 | | |
| CONFIGURATION ITEM | CI NO. | | | | | | | | |
| SCTGEN GUI | 5.1 | 2.3 | 2.4 | 2.5 | 2.5a | 2.6 | 2.6.1 | | |
| SCTGEN Application Software | 5.2 | 2.3 | 2.4 | 2.5 | 2.5a | 2.6 | 2.6.1 | | |
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## Attachment D- Listing of Delivery Contents

Delivery is on one 4 mm magnetic tape.  The contents of the tar tape are listed below.  Section D.1 contains the file name listings for the SCTGEN GUI portion.  No changes were applied to the SCTGEN application software.

**D.1  SCTGEN GUI Patch Release 2.6.1**

globals.tcl
procREGION.tcl
winSCRIPT.tcl

## <u>Attachment E — Mission Systems Configuration Management Form</u>

This attachment contains the completed Mission Systems Configuration Management (MSCM) form.

## Mission Systems Configuration Management Form

| 1. ORIGINATOR | 2. ORGANIZATION | 3. PHONE | 4. E-MAIL ADDRESS |
|---|---|---|---|
| Donald Holmes | CSOC | (301) 805-3547 | Donald.Holmes@csoconline.com |

| 5. ELEMENT | | 6. INSTALLATION PRIORITY | 7. TRACKING NUMBER |
|---|---|---|---|
| Other ======> SCTGEN | | Routine | (Assigned by CM Office) |

| 8. SOURCE CHANGE REQUEST(S): | 9. APPROVALS | | |
|---|---|---|---|
| ETS DRB approved SCTGEN release for SMO DR closure. | Element Manager | | / / |
| | Flight Ops Director | | / / |
| | Operations Manager | | / / |

### 10. DELIVERED SYSTEM (Check all that apply)

| | | Name | Version | Media Identification | Identification Date |
|---|---|---|---|---|---|
| ☐ | Hardware | | | | |
| ☒ | Software | SCTGEN | R2.6.1 | 4 mm tape | 7/3/01 |
| ☐ | Database | | | | |
| ☒ | Documentation: | | | | |
| | Delivery Package | | n/a | Via email | 7/3/01 |
| | | | | | |
| | | | | | |
| ☐ | Other | | | | |

### 11. CHANGE DESCRIPTION

SCTGEN 2.6.1 addresses one DR.  No workaround is provided.

### 12. ATTACHMENT(S): Check if YES ☒

Description:  SCTGEN 2.6.1 delivery package (cover letter with attachments) dated 7/3/01.

### 13. CM OFFICE USE

| | Location (Bldg/Room) | Slot location(s) |
|---|---|---|
| Hardware | / | |
| Media | / | |
| Documentation | / | |
| Installation date | / / | CM Office Signature |

Form MSCM (970327)